Volunteer Firemen

Professional Journal of the Volunteer Firemen's Section of the National Fire Protection Association

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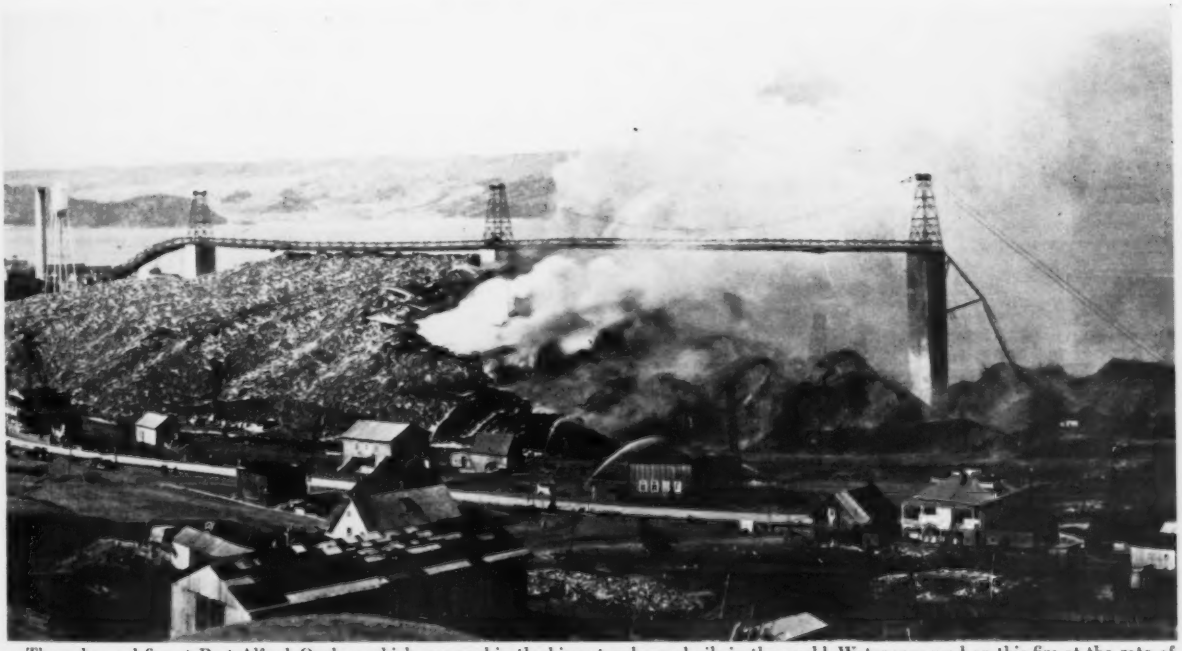


The pulpwood fire at Port Alfred, Quebec, which occurred in the biggest pulpwood pile in the world. Water was used on this fire at the rate of 30,000 gallons per minute. The fire burned 12 days and caused a loss of $2,500,000.

Pulpwood Piles Make Bad Fires

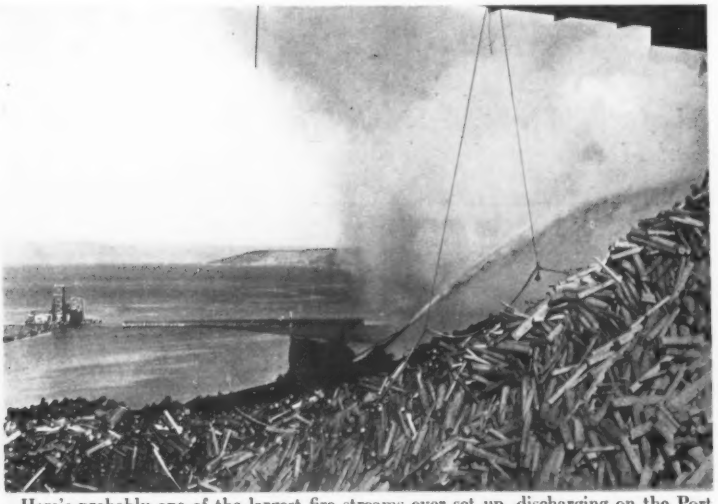
Experience Shows These Fires Must Have Tons of Water Put on Them Fast

VOLUNTEER fire departments in forest areas which produce wood for paper know something about the fire problem presented by the huge piles of pulpwood which are stored at paper mills. These piles occasionally take fire and when this happens, some fire department (most often a volunteer one because of the location of the plant) has a job on its hands.

The N.F.P.A. Department of Fire Record reports that a detailed study of these fires throws much light on the relatively large quantities of water which are required to combat fires where such large amounts of combustible materials are involved. Lumber yard fires, which are within the experience of every fire department, present the same problems to some extent. The conclusion drawn is that unless it can be applied very promptly at the start of the fire, water can seldom be put on the fire in large enough quantities to control it.

To see how this is, consider some of the figures on the pulpwood fire at Port Alfred, Quebec, in May, 1932, which is illustrated herewith. This was the biggest pulpwood pile in the world and when it burned set a record for pulpwood pile fires.

The pile contained 221,000 cords of pulpwood. It burned for twelve days and caused a loss of $2,500,000. In addition to 3 pumpers from nearby fire departments, mill pumps and fire pumps,



Here's probably one of the largest fire streams ever set up, discharging on the Port Alfred pulpwood pile fire. The nozzle is 4 inches at the tip and comes off an 8-inch pipe fed by a 6,000 G.P.M. pump.

including several from neighboring plants, were mobilized and put into effective positions to get suction and deliver water. There were four pumps of approximately 1,000 G.P.M. capacity, four with capacities in excess of 2,000 G.P.M., five 6,000 G.P.M. pumps and in addition a hydraulic dredge which delivered some 13,000 G.P.M. Five hundred volunteers, in two shifts, worked desperately but resourcefully during the twelve days and were finally successful in stopping the fire, saving 40,000 cords of wood and preventing the destruction of the plant which the pile exposed.

The next time big fires are being discussed, tell them about this one.

Fire Department Instructors Meet in St. Louis

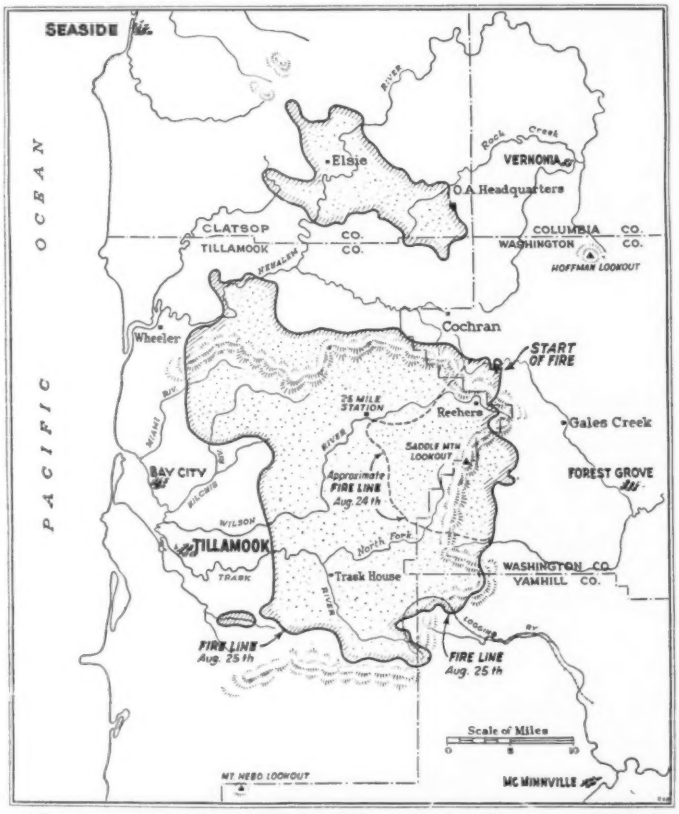
OVER 70 were present at the three-day Fire Department Instructors' Conference held at the St. Louis Fire Department Drill School in January. The Conference was under the sponsorship of the Fire Prevention Department of the Western Actuarial Bureau and Mr. R. E. Vernor, Manager, presided. The attendance included drill masters of the fire departments of numerous cities, fire chiefs, university authorities cooperating in vocational training work for firemen, and the fire department instructors of the inspection departments of several of the middle western states.

An extensive program of drill work and a discussion of various methods of performing fire department drill operations was led by Harry K. Rogers of the Western Actuarial Bureau. Addresses were also presented by speakers, among whom were Percy Bugbee, Assistant Managing Director of the National Fire Protection Association; Dean H. G. Ingham, Director of Instruction, University of Kansas; Clarence Goldsmith, Assistant Chief Engineer, National Board of Fire Underwriters; Battalion Chief H. J. Callahan and District Chief Thomas Hardwick, the drill masters of the fire departments of Detroit and Kansas City respectively; and W. Fred Heisler, Instructor of Vocational Education, Oklahoma A. & M. College.

Poisonous Gases from Burning Materials

THE News-Letter of the New Mexico State Firemen's Association reports the results of studies made at the Brooklyn Polytechnic Institute of the kind of gases given off when various materials burn. The results are of great importance to all fire fighters.

Wood and other cellulose materials, burning in a closed room with a limited amount of air, were found to give off a gas highly concentrated with carbon dioxide (which will suffocate), and car-



Map prepared by the State Forester of Oregon to show the area covered by the great Tillamook Forest Conflagration of last August, the most destructive fire Oregon had experienced in 65 years. Douglas fir trees containing lumber worth some $200,000,000 were destroyed, and one life was lost.

bon monoxide (which is highly poisonous). A gasoline fire was found to give off similar gases, but in much lower concentrations, from which it may be assumed that the fumes from a gasoline fire could be breathed by a fireman for a longer period than the more poisonous and suffocating gases from a wood or cellulose fire. Some materials gave a great number and variety of gases.

For example, woolens produce in addition to carbon dioxide and carbon monoxide, hydrogen sulphide, hydrocyanic acid, ammonia, nitrogen and hydrogen. These findings help to explain why many persons lose their lives in fires, even when not actually burned, by reason of being trapped in a burning building in the presence of these deadly products of combustion.

Condensed Presentation of Good Fire Advice

THE following condensed advice on fires is printed on cards and used as a fire prevention educational message and circulated by the several firemen's associations in Pennsylvania. It is the work of Col. E. M. Ranck of Lancaster, Pa., Chairman of the Fire Prevention Committees of the Firemen's Association of the State of Pennsylvania, the Keystone Fire Chiefs Association, the Southeastern Firemen's Association and the Lancaster County Firemen's Association.

Within the First Five Minutes of a Fire

SEND ALARM	Phone Bell Message Alarm Box Direct Firemen
SAVE LIFE	From inside From outside From smoke From gases
FIGHT FIRE	Cut off air Confine Smother Sand Water Extinguisher
KEEP COOL	At first blaze At telephone If on fire With family
BE PREPARED	To get help To confine fire To put out fire To save life To save valuables To assist Firemen To have fire drill

Picture furnished through the courtesy of Chief Ralph J. Scott, of the Los Angeles Fire Department, showing the area where 28 men perished in October. The men, workers on a county unemployment project, were trapped between two brush fires.

Fires That Put Themselves Out

FROM time to time reports are received of small fires in confined spaces which have apparently burned themselves out for lack of air. Theoretically any fire in a tight enclosure will go out as soon as it has exhausted the available air supply, but as a practical matter few enclosures are sufficiently tight to bring about this result.

Speaking at the Northwest Fire School at Minneapolis last summer District Chief Leslie Shewan of the Winnipeg Fire Department referred to three fires in Winnipeg during the preceding year that extinguished themselves in this way. One of these, cited as typical, occurred in a chain store. When the manager opened the store in the morning he found the building filled with stagnant smoke. Fire had started in the basement, apparently burning vigorously for a time. All the stock in the store was ruined. The building was tight and well constructed, and the fire had gone out from lack of oxygen.

What is probably the most extensive fire in this class that has been recorded to date is one reported by Fire Chief George F. Graff of New Albany, Indiana, on July 28, 1933. The occupants of a house on Silver Hills near New Albany were away in Chicago for a week and the house was closed. No one knew there was a fire until the family returned to find all the rooms on the first floor completely burned out and upstairs everything black from smoke. Chief Graff investigated and found evidence of considerable fire. The furnishings and stairs were burned; electric light bulbs had melted. Glass in the windows had softened from the heat. The outside of the building showed no signs of fire and a neighbor living within fifty feet had not noticed any fire nor smelled smoke. The chief is of the opinion that the fire burned out of its own accord.

It is a well-known fact that the products of combustion of a fire constitute an excellent fire extinguishing agent if properly applied, but in present practice it is seldom possible to extinguish a fire by cutting off all ventilation. If the conditions under which fire would be self-extinguishing could be determined and reproduced in practice we might have a very interesting new development in fire extinguishing technique.

Flier Gives Fire Alarm

LIEUTENANT Minton W. Kaye of March Field spotted a fire while flying over the Cleveland National Forest, just outside of Los Angeles, and gave the alarm by dropping a message to a group of Civilian Conservation Corps workers who were able to put the fire under control. The prompt action made possible by Lieutenant Kaye's alarm saved a serious fire which had threatened one of the major water sheds in that part of California's forest lands.

A Citizen Prepares for Fire

The Steps One Man Has Taken to Make His Home and Family Safe

By Donald Holbrook

Private Trustee by Profession; Observer and Writer on Fire Department Matters by Avocation.

THE name of the man in this story is not important. Neither is the name of the little community which is the place of the story. The exact results of his thoughts about fire and the measures to take to make his home safe from fire, while interesting, are not in themselves so important either. They reflect his personal experience and judgment. Another person might have worked out a somewhat different solution of his problem.

The significant thing is *that he did think* about these things. And that he did something about them.

Not unreasonably, he is proud of what he has worked out, and this evening his friend, the chief of the fire department, is coming out to look over his layout.

The chief, as he drives to keep his appointment, is pleasantly aware of the attractiveness of the picture which the numerous small estates of the district make with their colorful gardens and carefully laid out shrubbery. He knows most of the home owners give more thought to these gardens and lawns than they do to hazards of fire. They are always impatient, thought the chief, with even the few restrictions which the town officials place on home construction.

He slows down his car before a white painted Colonial type house. A low picket fence breaks the approach of a spacious lawn and the owner is standing in the gate. As the chief stops he looks at the house. Extensive alterations have taken place since his last visit. His glance takes in the new ell on one side and the small portico on the other.

"What's that?" he explodes as he greets his host. "A fire escape on a private house!" He indicates with outstretched arm a small metal ladder, painted the color of the house and running up its side.

"Right you are, Chief, and there's another on the back of the house from the boy's room on the third floor to the roof of the porch." The owner smiles at the other's quick appraisal. "It's funny how shocked the average person becomes at the idea of installing a fire escape on a private house. After all it's a matter of how it is put up. I've had many guests who never noticed the escapes at all.

"You remember, Chief, how my central staircase runs right straight up to the third floor, and that I have no back stairs to serve as a second exit. I have put casement windows, opening out, one in each room on the second and third floors, which lead either to a fire escape or on to a porch roof.

"When we have a fire drill for the children, at the sound of the alarm they go to the casement windows, down the fire escapes, and report to me in bathrobes and slippers outside the front door."

By this time the Chief's face wears a broad grin. He knows it is the drill which makes the fire escapes at all worth while. Because the children use the escapes regularly they can use them in an actual fire without confusion or haste because of their thorough familiarity with them.

They step into the front hallway. "Let's see this alarm system you were telling me about," says the Chief.

"There are really three independent fire alarm systems," explains his friend. "The first is composed of five thermostats located in the kitchen and basement. Unusual heat near any one thermostat makes an electrical contact and sounds a siren horn on the second floor.

"Another system is composed of several mechanically operated bells. In each alarm bell unit is a wind-up mechanism. A fusible link releases the mechanism and rings the bell. These bells are located, one in the laundry over the ironing board and one at the head of the cellar stairs.

"The third system is operated from electric battery current, and when a button is pushed rings a ten inch gong on the second floor. This gong is used primarily for fire drills and is available if a fire has burned out the regular electric circuits.

"Here," pointing to the wall by the front door, "are two buttons. One rings the electric gong and the other operates the siren on the automatic system. These make it possible to operate the alarms in case fire is discovered by someone in the house, or to test the systems."

At this point the owner led the way upstairs, pausing in front of an alcove in the hallway to show the Chief the panel on which were hung the house gong and siren. "Not at all conspicuous, as you see," remarked the owner.

In the master's bedroom the Chief is shown buttons, duplicates of those downstairs, installed near the beds. A light switch, painted red, is alongside of them.

"Now, Chief, that switch works my prize bet. If you will step into the hall and by leaning over the banister look up to the third floor ceiling, you will see that I have installed a flood light which this switch operates. It has a 250-watt bulb and will brilliantly illuminate the three hallways. I have used to advantage the open area to afford the illumination instantly necessary in case of fire or accident."

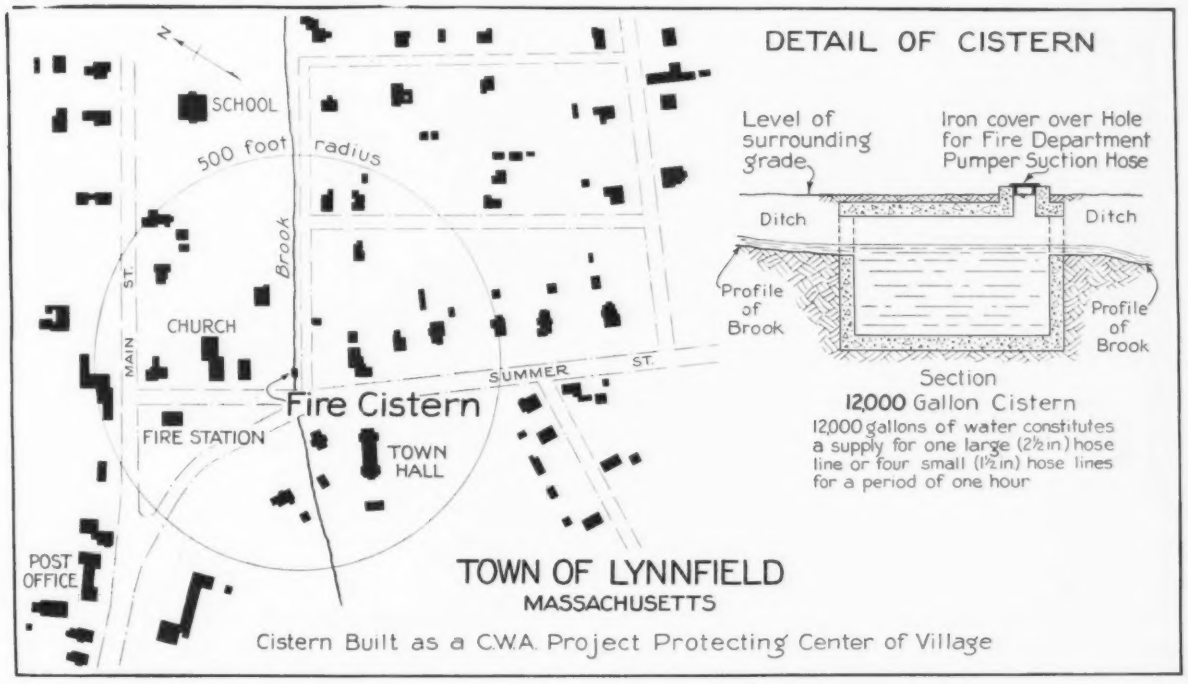
"Well," remarked the Chief, "I'll hand it to you on this alarm system, but what have you got to put out fires?"

"Only the regular soda and acid extinguishers, one on each floor, Chief. The main objective is to save the lives of the people in the house. I intend to leave to you the job of any fire which gets beyond the incipient stage."

As they started down the stairs the owner continues, "The children are very earnest about the fire drills which we have regularly both at night and in the daytime. They are taught to always keep their doors closed at night and in case of an alarm to feel the hallway door and if it should be warm never to open it, but escape to the fire escape."

"By the way," says the Chief as he made ready to leave, "how does your wife take to these gadgets and bright ideas of yours?"

The owner laughs. "At first she was just politely tolerant, but since the fire over in Steubenville when Dr. Henry's little girl was burned she has become the chief advocate for all these precautions. She realizes that some sort of alarm system might have prevented that tragedy."



Water Sites for Pumper Suction

How Massachusetts Volunteers with CWA Funds Are Developing Sources of Water in Unprotected Areas

FIRE protection for dwellings and other buildings situated beyond the limits of town water systems or in communities where no public water supplies are available, is the aim of an important CWA project under way in the State of Massachusetts. Although financed by federal funds, this project is not under local CWA supervision but is directed by the State Department of Agriculture which has provided a small corps of engineers who, with the local fire authorities in 62 towns in five southeastern counties of the state, are developing various sources of water for fire department pumpers. Fire chiefs, consulting with these engineers, obtain foremen and a crew of local men requisitioned from those eligible for CWA employment. These crews are put to work on projects determined by the chief and the engineers after a survey of local conditions.

The purpose of the CWA has been accomplished by the employment of 568 men in this work and while exact figures have not been compiled, it is estimated that 250 to 300 water holes, approaches or cisterns have been constructed, and as many more are being built. Taking into consideration buildings of which there are approximately 2,500 now within 1,000 feet of these new supplies, it may be estimated from assessed valuations that the value of buildings previously unprotected, but now cared for, is between $8,000,000 and $9,000,000.

Much of the information for this article is furnished through the courtesy of Stanley M. Brown, Director, Project No. 2279, Massachusetts Civil Works Administration, conducted by the Massachusetts Department of Agriculture.

The idea of the project now being carried out originated with the Massachusetts State Fire Prevention Committee, made up of representatives of farm and firemen's organizations, and others cooperating in the development of a state-wide fire prevention program. The Massachusetts Department of Agriculture, one of the cooperating agencies represented on this committee, undertook to organize the project and apply for CWA funds. It was decided to limit the present project to the southeastern part of the state where the necessary work could be carried on during the winter months better than elsewhere in the Commonwealth.

On this project the towns furnish the transportation and materials needed for the jobs, while the funds to pay labor are furnished through the CWA. The success of the program to date indicates that the rest of the state should be included in the scope of these fire protection projects.

To carry out the five-county project, the state department of agriculture was fortunate in obtaining a competent engineer, well qualified for organization work as State Supervisor, with other engineers to supervise work in the field, which was divided into five districts. After consultation with the local fire chief and other local authorities to determine the work to be done, these men

Brooks for water supplies need not be very large. The picture shows the cistern on Lynnfield Common in construction. The brook is scarcely more than a drainage ditch.

have kept some 68 crews busy. The average crew consists of 7 men and a foreman.

The high type of workman available for this project has been particularly noticeable. In some cases unemployed volunteer fire chiefs have been glad to accept positions as foremen and in many instances volunteer firemen are employed on the work, which accounts for the interest which has been manifested. The amazing results of only slightly over a month of work attest to the diligence and efficiency with which the work has been carried on.

Wholly aside from the magnitude of the work of organizing the necessary engineering facilities for the direction of the project, the types of water sites developed are of interest. A description of the more general types follows.

In cases where a brook passes under or near a highway, it may be widened and deepened. The bottom and sides are paved or stoned up to reduce erosion. It is necessary to be sure that the arrangement is such that when a pumper's suction is in place there is at least two feet of water over the strainer. One simple way of assuring this was by installing a section of tile or concrete pipe, vertically, forming a sump below the bottom of the basin into which all the water available will drain. Many times it has been necessary to prepare a suitable driveway and approach to the site, so that pumpers can get conveniently near for effective suction.

On Cape Cod and the southern shores of the state, there are numerous salt water inlets as well as lakes or ponds from which water can be made available in practically unlimited amounts simply by the construction of suitable approaches. Care has been taken that water will be available at salt water sites at lowest tides, and even in the driest weather.

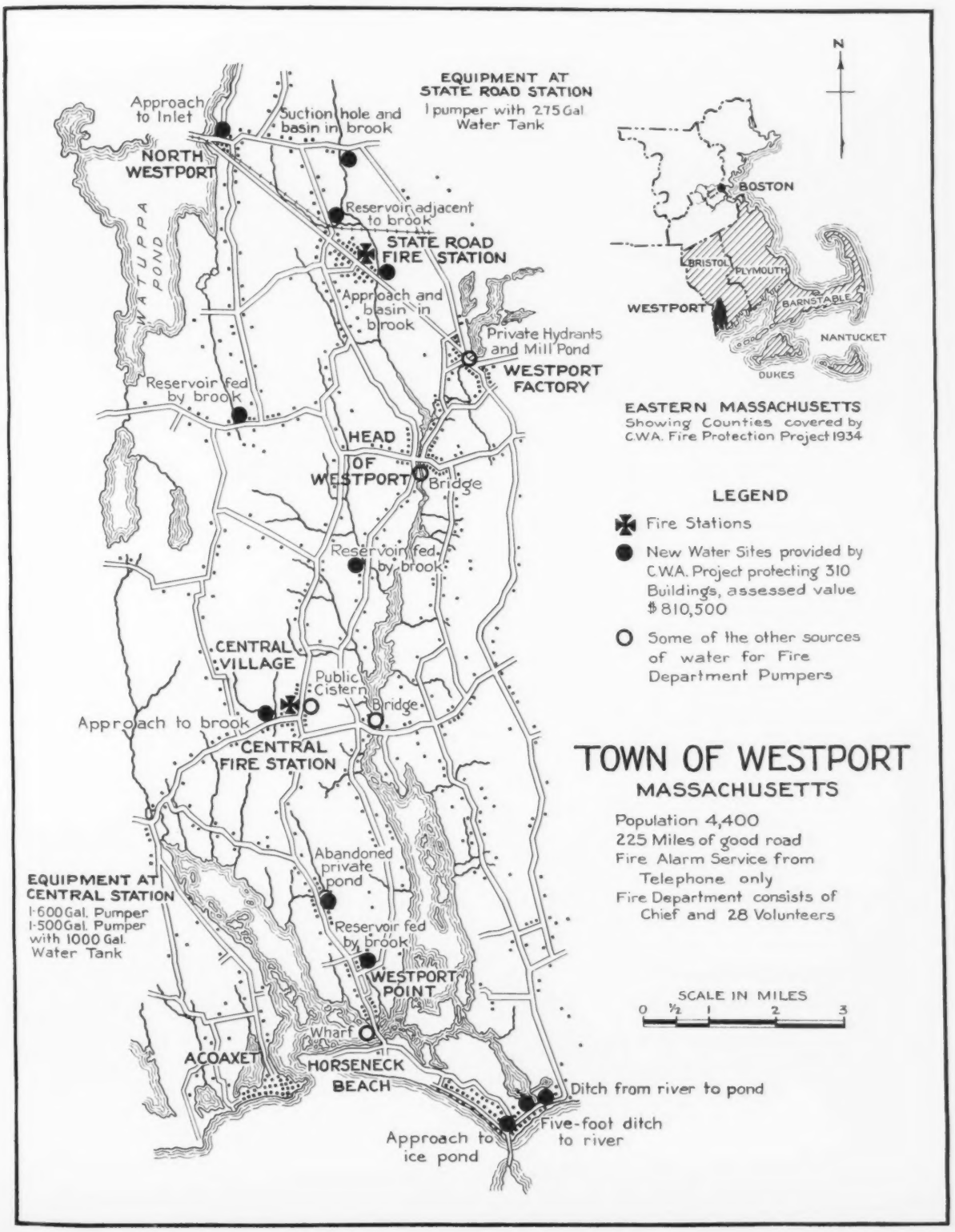
Storage reservoirs or cisterns of 15,000 to 25,000 gallons capacity have been provided in some instances. These are particularly adapted to small town centers which have no immediate supply. Sometimes they are filled from wells or a small brook. Such reservoirs provide a supply which is readily available for use at the start of a fire and can take care of several hose lines for a time long enough so that other pumpers can be set up to provide water to replenish the supply from a more distant point.

The Town of Westport, in Bristol County, a map of which is presented herewith, offers an interesting example of how these water site projects fit into the fire prevention picture of the whole township. Westport embraces five villages, two beach resort communities, and a considerable area which is strictly rural. The new water sites in general take care of places where a number of important buildings are grouped and supplement the already numerous opportunities for pumper suction at the considerable number of brooks, ponds and inlets which are available in this town.

At a recent fire in a house near North Watuppa Pond at North Westport, there was an opportunity for one of these water sites to prove its value. The dwelling was a mass of flames within 15 minutes of the start of the fire and had spread to wood shingle roofs of four other buildings but was controlled because of the availability of water from a sump hole from which a fire department pumper could take suction.

It is evident that the territory where this work of providing new water sites has been going on is now in a much better position to combat fires in many thickly settled communities, which will mean greatly added safety to life and property. Interest has been created towards establishing volunteer departments in many communities where such service is not available. Other localities with none or insufficient apparatus are being stirred into action. Also many a fire chief with a good department and good equipment is breathing easier, realizing that much of the property under his care can be more effectively taken care of. Those in charge are frank to admit that the results have only been obtained through the wholehearted cooperation of the various fire departments and fire wardens.

A shallow ditch from a nearby swamp brings water to this suction hole built at the roadside in Plympton, Plymouth County.


EQUIPMENT AT STATE ROAD STATION
1 pumper with 275 Gal Water Tank
Approach to Inlet
Suction hole and basin in brook
NORTH WESTPORT
WATUPPA POND
Reservoir adjacent to brook
STATE ROAD FIRE STATION
Approach and basin in brook
Private Hydrants and Mill Pond
WESTPORT FACTORY
Reservoir fed by brook
HEAD OF WESTPORT
Bridge
Reservoir fed by brook
CENTRAL VILLAGE
Public Cistern
Bridge
Approach to brook
CENTRAL FIRE STATION
Abandoned private pond
Reservoir fed by brook
WESTPORT POINT
Wharf
ACOAXET
HORSENECK BEACH
Ditch from river to pond
Five-foot ditch to river
Approach to ice pond
EQUIPMENT AT CENTRAL STATION
1-600 Gal. Pumper
1-500 Gal. Pumper with 1000 Gal. Water Tank
N
BOSTON
BRISTOL
PLYMOUTH
BARNSTABLE
WESTPORT
NANTUCKET
DUKES
EASTERN MASSACHUSETTS
Showing Counties covered by C.W.A. Fire Protection Project 1934
LEGEND
Fire Stations
New Water Sites provided by C.W.A. Project protecting 310 Buildings, assessed value $810,500
Some of the other sources of water for Fire Department Pumpers
TOWN OF WESTPORT
MASSACHUSETTS
Population 4,400
225 Miles of good road
Fire Alarm Service from Telephone only
Fire Department consists of Chief and 28 Volunteers
SCALE IN MILES
0 ½ 1 2 3

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The Effect of Politics

One of the largest cities of the United States to have a principally volunteer fire department is the City of Harrisburg, Pa. For a considerable period of years the fire chief of Harrisburg, Mr. M. M. Tawney, has been recognized as an outstanding chief of a volunteer department. Chief Tawney was a real leader of his men. He was able to secure more training and more fire prevention work in his department than many of the volunteer fire departments of large personnel have been able to do. Last year Chief Tawney was President of the Firemen's Association of the State of Pennsylvania and was re-elected for another term at the annual meeting in October against his own wishes, a striking proof of the high regard in which he was held by his brother firemen of Pennsylvania.

As in so many other cities this fall, Harrisburg voters provided a new deal of city officials. The new city officials had made political promises. They appear to be principally interested, not in the fire department efficiency or maintaining the fine fire record of the city, but in taking care of their friends. Chief Tawney sums up the situation admirably in his letter of resignation to the commissioner which is as follows:

"After having a conference in your office on January 1, 1934, with you in regards to being retained as chief of the Fire Department; receiving an acknowledgment from you of the efficiency of both the department, including myself and the assistant chief, which is highly appreciated; and further being informed by you of the political promises and pledges made by yourself, I deem it proper that my resignation be submitted to you.

"A fire department cannot function properly unless there is complete harmony between the operating heads and the commission, and this being the case, I do not wish to serve as chief of the Fire Department where politics or anything else is placed ahead of efficiency involving human lives and property.

"Thanking you for the time for a conference and wishing you success in your administration, I am,

Very truly yours,
Millard M. Tawney."

Let's Have Discussions

We commend to your careful reading a letter in this issue from Ed. Archbold, Chief at Centralia, Illinois, and President of the Egyptian Fire Fighters Association. There is a story about that association which before long we hope to tell in VOLUNTEER FIREMEN, but for the present it is sufficient to say that it is made up of fire departments in the southern part of the State of Illinois. Chief Archbold is actively assisting us in bringing the Volunteer Firemen's Section to the attention of the volunteer departments in that territory.

In his letter he expresses some differences with the method of performing the hose coupling operations as described by Battalion Chief Rogers of Seattle, Washington, in the January issue. So far our "Letters to the Editor" department has been filled with comments on the organization of the new section. Now that the magazine is going to some 15,000 readers each month, we expect that this department may be a means toward carrying out one of the principal objectives of the section, namely, the interchange of experience among volunteer fire departments.

Chief Archbold has the distinction, therefore, of being the first to have published detailed critical comment on an article. We hope other readers will not hesitate to write in when they have remarks to contribute and we'll use them to the limit of space available. We do not believe that any reader need fear hurting the feelings of those who prepare the articles they wish to discuss. Being men of broad experience themselves, they know there are many equally good ways to secure the same results and would welcome the discussions.

We Have No Solicitors

Each month we are distributing a large number of sample copies of VOLUNTEER FIREMEN to bring it to the attention of as large a number of volunteer firemen as possible. Much of this distribution is through the courtesy and cooperation of officials of state firemen's associations, state fire marshals and others interested in advancing the work of volunteer fire departments. The assistance of these individuals is voluntary and none is attempting to handle any of the details of dues or applications for membership. Furthermore, we are employing no solicitors. All membership applications and dues remittances should therefore be mailed direct to N.F.P.A. headquarters at Boston to ensure prompt attention.

Program

of the Volunteer Firemen's Section

1. The interchange of experience among volunteer fire departments.

2. The development of a medium for broadcasting new developments and new ideas of benefit to volunteer fire departments.

3. The development of standard practices and methods for fire fighting by volunteer fire departments.

4. The promotion of fire prevention work in rural districts.

5. The promotion of the organization of new volunteer fire companies and extension of the service of existing companies where necessary.

The Second *Thousand*

IN THE January issue of VOLUNTEER FIREMEN we printed the names of the volunteer fire companies whose members comprised the first thousand volunteer firemen who had joined the Volunteer Firemen's Section of the National Fire Protection Association. Below we print the list of companies whose members make up the second thousand. Twenty states, Alaska and Canada are represented, an even more diversified list than the first thousand. Our section already is representative of the entire continent and is truly national and international in character. The interests and the problems of volunteer firemen know no state or national boundaries. We believe the Volunteer Firemen's Section will continue to grow in every part of the United States and Canada.

Crescent City Fire Department, Crescent City, Calif.
Kingsburg Fire Department, Kingsburg, Calif.
Portola Fire Department, Portola, Calif.
Fort Morgan Fire Department, Fort Morgan, Colo.
Sterling Volunteer Fire Department, Sterling, Colo.
Shelley Volunteer Firemen, Shelley, Idaho.
Franklin Park Fire Department, Franklin Park, Ill.
Lanark Fire Department, Lanark, Ill.
Wheaton Volunteer Fire Department, Wheaton, Ill.
Atlantic Fire Department, Atlantic, Iowa.
The United Steam Fire Engine Co. #3, Frederick, Md.
Belchertown Fire Department, Belchertown, Mass.
Whitefish Volunteer Fire Department, Whitefish, Mont.
Ashton Volunteer Fire Department, Ashton, Neb.
Franklin Volunteer Fire Department, Franklin, Neb.
Osmond Volunteer Fire Department, Osmond, Neb.
Wahoo Volunteer Fire Department, Wahoo, Neb.
Atco Volunteer Fire Co. #1, Atco, N. J.
Livingston Fire Department, Livingston, N. J.
Morris Township Fire Department, Morristown, N. J.
Akron Fire Department, Akron, N. Y.
Garden City Fire Department, Garden City, N. Y.
Wantagh Fire Department, Wantagh, N. Y.
Corning Volunteer Fire Department, Corning, Ohio.
Granville Volunteer Fire Department, Granville, Ohio.
Maderia & Vicinity Fire Department, Maderia, Ohio.
Miami Township Fire Department, Addyston, Ohio.
North Canton Fire Department, North Canton, Ohio.
Smithville Community Fire Department, Smithville, Ohio.
Vermilion Volunteer Fire Company, Vermilion, Ohio.
The Dalles Fire Department, The Dalles, Ore.
North Belle Vernon Volunteer Fire Department, North Belle Vernon, Pa.
Woonasquatucket Valley Firemen's League, Graniteville, R. I.
Highmore Volunteer Fire Department, Highmore, S. D.
Carthage Fire Department, Carthage, Texas.
Jacksonville Volunteer Fire Department, Jacksonville, Texas.
Roscoe Volunteer Fire Department, Roscoe, Texas.
Schulenberg Fire Department, Schulenberg, Texas.
Weslaco Volunteer Fire Department, Weslaco, Texas.
Bingham Volunteer Fire Department No. 1, Bingham Canyon, Utah.
Wapato Fire Department, Wapato, Wash.
Van Dyne Volunteer Fire Department, Van Dyne, Wis.
Juneau Volunteer Fire Department, Juneau, Alaska.
Seward Volunteer Fire Department, Seward, Alaska.
New Liskeard Fire Department, New Liskeard, Ontario.
Kelowna Volunteer Fire Department, Kelowna, British Columbia.

CLASSES OF MEMBERSHIP

National Fire Protection Association

Organization Membership

STATE and regional associations of volunteer firemen shall be eligible to organization membership in the National Fire Protection Association and entitled to six votes in the affairs of the Association and four sets of the publications which go regularly to N.F.P.A. members and members of the Volunteer Firemen's Section. — Dues $60 per year.

Membership for Individuals

Any volunteer fireman who so desires may apply for regular membership in the National Fire Protection Association. This entitles him to one vote in the affairs of the Association and a complete set of the publications which go regularly to N.F.P.A. members and members of the Volunteer Firemen's Section. — Dues $10 per year.

Volunteer Firemen's Section

An individual volunteer fireman shall be eligible to membership in the Volunteer Firemen's Section. He shall receive one copy of VOLUNTEER FIREMEN, the monthly journal of the Volunteer Firemen's Section, mailed regularly to his home address. — Dues 50 cents per year.

Because of the very low individual dues a minimum of 20 members from one department or fire company is required. Membership may be applied for by one member of the company or department collecting 50 cents for each of the 20 or more members and making a single remittance for the group, or the company or department may vote to take out membership for its entire roster and make a single remittance from the company or department treasury. In either case the company or department itself is thereby made an eligible member of the National Fire Protection Association and entitled to one vote and full participation in the affairs of the Association. All the literature regularly issued to N.F.P.A. members is mailed to headquarters of the company or department.

The requirement of a minimum of 20 names may make some difficulty for the few departments whose rosters are less than 20. These may make special arrangements. They may send in the minimum remittance for 20 men at 50 cents each and divide this pro rata. This would add only a few cents per man. Another plan which could be worked out in most communities would be to get a number of citizens, interested but not active members of the department, to make up the required 20 for the sake of receiving the interesting material in VOLUNTEER FIREMEN.

Booster Tank Outfits

Thinking Fire Chiefs now recognize that light weight trucks carrying 100 to 200 gallons, with Booster Pump, can arrive and extinguish 80% to 90% of all fires! BEFORE BIG APPARATUS COULD ARRIVE THE FIRE IS OUT!

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☛ All complete with 200 gallon tank only **$319.00**

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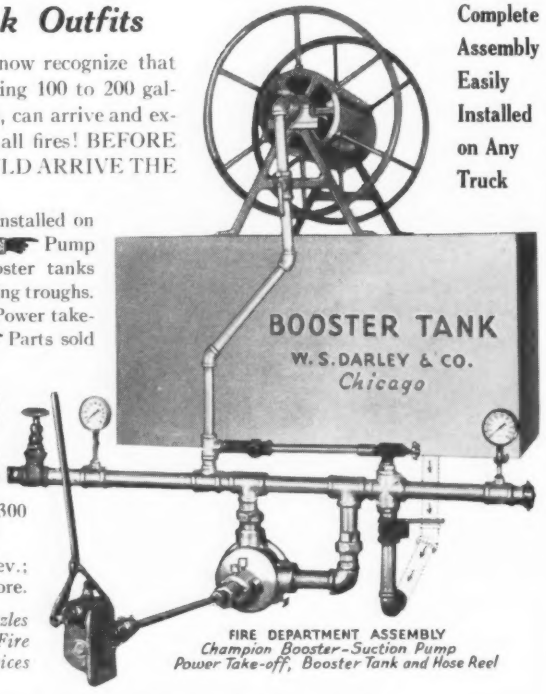

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Letters to the Editor

National Fire Protection Association,
Boston, Mass.

I have received the November, December and January issues of VOLUNTEER FIREMEN and find that each month your magazine contains more interesting and instructive information. Articles such as "Taking a Hydrant and Laying a Line" that appears in the January issue, surely will prove beneficial to every volunteer fireman and his company.

Wishing you the best of success in this new undertaking and hoping that every Volunteer Fire Company will see and take the advantage of enrolling in your association, I am

Respectfully yours,
EARL H. BITTIRMAN, Secretary,
Akron, N. Y., Fire Department

* * *

National Fire Protection Association,
Boston, Mass.

No doubt you will be surprised at the contents of this letter following upon one telling you how much I enjoyed reading VOLUNTEER FIREMEN. In fact, I read it so carefully that I am going to register a "kick," or a suggestion, or whatever you want to call it.

With all due respect to the Seattle Fire Department and Washington State Firemen's Association, I believe that the following outline on making and breaking hose lines is easier and safer than the one recommended by them. However, I agree that making and breaking a coupling in a hose line is a one man job.

"First," the man breaking or making coupling should not straddle hose. Reason: Should he drop coupling, there is danger of injury to feet.

"Second," should hose be given sudden jerk, he would be thrown to ground with chance of injury.

"Third," — Man with back to hydrant or pumper cannot see what is taking place there.

In making or breaking coupling, the man should stand beside and facing hose at coupling, with feet slightly apart; grasp hose with both hands, one at male coupling and the other at female; bring the hose just above the knees and rest it on both legs, thereby giving him a firm footing and perfect control of both couplings, either in making or breaking coupling, with no danger of being thrown down should the hose be suddenly jerked. Also, giving him a clear view either towards hydrant or pumper.

Further suggestion, in regards putting on nozzle. Place one foot directly behind male coupling on top of hose and push down, thereby tipping the coupling to a 45° angle, or if preferred, place the other foot in front and under the coupling, bringing the feet together, which places the coupling in a vertical position, permitting the man to use both hands in guiding and turning the nozzle.

I could not help but notice these things, and as we are trying to standardize the teaching in Fire Department Work, I felt that you would be glad to cooperate with us. Knowing that your magazine will reach many departments, thereby causing a conflict in teaching methods, which makes it difficult for the instructors.

Yours very truly,
Ed. Archbold, President,
Egyptian Fire Fighters' Association,
Centralia, Ill.

* * *

National Fire Protection Association,
Boston, Mass.

This Association received their first issue of the VOLUNTEER FIREMEN and we want to congratulate you on your forward step.

The writer has been interested in fire prevention work for the past ten years and I know that the publication of the VOLUNTEER FIREMEN will go a long way in bringing up-to-date information to some of the volunteer fire departments throughout the country. This field has been sadly neglected by all interested in fire prevention and fire fighting so I know that the publication will be welcomed by all those who have received it.

I sincerely hope that your subscription list will grow to take in practically every volunteer fire department in the United States.

Assuring you of the Nebraska Association's fullest cooperation at all times, I am

Very truly yours,
E. V. Neuberger, President,
Nebraska Fire Prevention Association.

* * *

National Fire Protection Association,
Boston, Mass.

Our members received their copies of VOLUNTEER FIREMEN and enjoyed reading the different articles. The article on ventilation in the December issue was very timely as we employed the methods outlined at a fire a short time before reading of it and it explained our actions to the younger members of our company better than we could explain it. As all are anxious to learn about the game they are looking forward to the coming issues.

Very truly yours,
Joseph B. Gavin, Secretary,
Jenkins Township Volunteer Hose
Co. No. 1, Pittston, Pa.

This cartoon is printed through the courtesy of the makers of Texaco Fire-Chief Gasoline — developed for fire engines and emergency vehicles. If you want a copy for framing to brighten up the fire house wall — autographed by Ed Wynn, the Texaco Fire-Chief — drop a line to The Texas Company, Room 1802, 135 East 42nd Street, New York, N. Y. We'll be glad to send it.

In the Current N.F.P.A. Publications

Volunteer companies or departments, members of the Volunteer Firemen's Section, have received these publications at company headquarters, in addition to VOLUNTEER FIREMEN *which each member receives at his home address by reason of membership in the section.*

An INDEX to N.F.P.A. Material

A complete subject index covering all the publications of the N.F.P.A. since September 1926 which covers all the material published in recent years, was furnished to members with the January Quarterly.

☛ A pamphlet listing publications on fire prevention and fire protection available from the National Fire Protection Association can be obtained on request.

In the QUARTERLY

The Annual Fire Loss Figures for 1933

The N.F.P.A.'s annual presentation of preliminary loss figures for the United States and Canada during 1933, together with a list of the big fires of the year.

The Fire Hazard of Gasoline Tank Trucks

The 42,000,000 gallons of gasoline used daily in the United States alone has to be transported in tank trucks of one sort or another before reaching the ultimate consumer. Accounts, many of them illustrated, of a large number of fires in tank trucks on the highways and during loading and unloading operations are given with conclusions as to principal causes and effective methods for their prevention and control.

Repeal Brings Back an Old Hazard

Joseph G. Hubbell, Manager of the National Inspection Company in Chicago, writes on the problem of fire prevention and fire protection in whiskey distilleries. According to Mr. Hubbell, distilleries are frequently located in small communities and outlying districts of cities and are therefore problems for the volunteer fire departments which protect those districts.

Fire Hazard Aboard Ships

The series of million-dollar fires in passenger vessels in recent years has directed attention to the fact that ship design has lagged behind the design of buildings on land in recognizing the principles of fire-resistive construction and other fire safety features. This is a defect which the N.F.P.A. Marine Section, including in its membership naval architects, shipbuilders and ship operators, are working to remedy. Mr. George G. Sharp, prominent naval architect outlines some of the studies of fire-resistive construction for vessels which are being made.

Why the Gas Holder Blew Up

The gas holder explosion in Neunkirchen, Germany, which killed 68 persons and injured many more caused much discussion as to why it had occurred. Reports from numerous sources throwing further light on the factors contributing to the disaster are summarized.

Reports on Three Major Fires

The Tillamook Forest Conflagration, by Lynn F. Cronemiller, State Forester of Oregon. A map showing the area covered by this fire is given in this issue of VOLUNTEER FIREMEN.

The Los Angeles Brush Fire Disaster, by Ralph J. Scott, Chief of the Los Angeles Fire Department. An illustration of the scene of this disaster is given in this issue of VOLUNTEER FIREMEN.

The Tiverton, R. I., Oil Fire. A picture and brief account of this fire appeared in the January issue of VOLUNTEER FIREMEN. Now a complete story of the fire, obtained from authoritative sources, is available.

EXECUTIVE OFFICE

NATIONAL FIRE PROTECTION ASSOCIATION

60 Batterymarch Street, Boston, Massachusetts

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